

REMARKS

The Office action mailed April 2, 2002 has been carefully reviewed along with the cited references. Applicant is pleased to note that claims 1-3, 5-6 and 19-21 are allowed and the indication that claims 7-9 and 11-12 contain allowable subject matter. However, applicant respectfully disagrees with the Examiner's rejections, and accordingly only an amendment of claim 7 to correct a misspelling is being presented.

Claims 13-16 and 18 were rejected under 103(a) as being unpatentable over Vincent (U.S. Pat. No. 5,439,219) in view of Hogan (U.S. Pat. No. 5,308,062). Those same claims were also rejected as obvious over Akatsuka (U.S. Pat. No. 5,437,450) in view of Hogan and Iwanaga (U.S. Pat. No. 4,725,060). Claim 17 was rejected as being unpatentable over Vincent in view of Hogan as applied to claims 13-16 and 18, and further in view of Kobayashi (U.S. Pat. No. 4,682,504) and Turner (U.S. Pat. No. 5,575,473).

Vincent in view of Hogan fails to disclose or suggest each of the limitations of claim 13, and accordingly cannot form the basis for an obviousness rejection. Claim 13 requires a butt section "which transitions without intervening discontinuities to a tapered intermediate section." Embodiment 2 in Vincent, which the Examiner relies upon for the rejection, discloses a flexible zone (30) of length (d), which produces a discontinuity in the flexible zone, as evidenced by FIG. 8. As stated in applicant's disclosure, "Vincent discloses a ... shaft comprising a discontinuous flexible zone interposed between a rigid butt section and the remainder of the shaft." (See paragraph bridging page 2-3) In the Decision on Appeal, the Board remarked that the applicant has defined discontinuity as "imposing a discontinuous flexible zone (bubble) between a rigid butt section and the rest of the shaft." (See pg. 4, footnote 1) Vincent fails to disclose or fairly suggest a butt section "which transitions without intervening discontinuities to a tapered intermediate section." Accordingly, Vincent fails to disclose or suggest all the limitations of claim 13.

The Examiner relied on Hogan as disclosing a butt section having parallel sidewalls, which does not cure the deficiency of Vincent. Furthermore, Hogan fails to disclose or suggest many of the limitations of claim 13, and therefore even if properly combined with Vincent, the combined references would fail to disclose every limitation of claim 13. Therefore, claim 13, and those depending from it, patentably define over Vincent in view of Hogan.

okay
7
0
does not
true for
surface

Akatsuka cannot be properly combined with Iwanaga because neither provides a proper motivation for combination. Applicant's claim requires the outside diameter of the butt section to be between .400 and .540 inches and the tip section to include a portion having an outside diameter adapted to be fitted to the hosel of a club head. Akatsuka discloses a tip end diameter range of .173-.488 inches and a butt end diameter range of .492-.728 inches. Akatsuka discloses a butt range that overlaps the claimed range, and according to MPEP 2131.03 to anticipate, a reference must disclose the range with "sufficient specificity." Akatsuka does, however, disclose a Comparative Example 2 to "further illustrate the present invention." Col. 7, lines 20-21. Example 2 discloses a butt end diameter of .524 inches and a tip outer diameter of .189 inches. The butt end diameter range falls within the upper 20% of the applicant's claimed range, however it is questionable whether a tip outer diameter of .189 inches is adapted to be fitted to the hosel of a club head. Akatsuka remarks that each sample shaft had a model head weighting, not a club head, affixed to the tip end. (Col. 10, lines 22-23) Nevertheless, Example 2 exhibited unsatisfactory mechanical characteristics. (Col. 10, lines 34-39)

The Examiner recognized that Akatsuka fails to disclose a butt section comprising a substantially cylindrical cross section and a kick point above a center of the shaft. Iwanaga discloses a shaft having a kick point above a center point of the shaft by interposing an intermediate flex section between a head-side section and a grip-side section. Col. 1, lines 61-62. The only teaching that Iwanaga provides is moving the kick point by introducing a discontinuity.

Any combination of Akatsuka and Iwanaga would require one skilled in the art to pick and choose a value from the ranges disclosed by Akatsuka or use Example 2. "When the purposes of the ranges are different and overlapping simply occurs by happenstance, obviousness is not present." *In re Fine* 5 USPQ2d 1596 (Fed. Cir. 1988). Akatsuka is concerned with providing a shaft having an average weight of as light as 1.4 g per inch, which is a much different purpose than the applicant's. Therefore, one skilled in the art would be required to combine Example 2 from Akatsuka, which according to Akatsuka exhibits poor mechanical characteristics, and introduce the discontinuity taught in Iwanaga. Applicant respectfully asserts that neither reference provides any suggestion or motivation to do so, and the only suggestion resides in the applicant's disclosure. Furthermore, any combination would not suggest all limitations of claim 13, because a discontinuity

7
0

disagree
↙

So

Same as
Applicant 7

0

would be introduced in the golf shaft.

As shown above, claim 13 defines over the references cited by the Examiner, and therefore those claims depending from it also patentably define over the cited references. For the reasons detailed above and the amendment made to claim 7, it is respectfully submitted claims 1-3, 5-9 and 11-21 are now in condition for allowance. An early notice to that effect is therefore earnestly solicited.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP

A handwritten signature in black ink, appearing to read 'Scott A. McCollister', with a long horizontal line extending to the right.

Scott A. McCollister
Reg. No. 33,961
1100 Superior Avenue, Seventh Floor
Cleveland, Ohio 44114-2518
(216) 861-5582

VERSION WITH MARKINGS TO SHOW CHANGES MADE

7. (Four Times Amended) A composite golf club shaft comprising:

an elongated tubular shaft comprising a plurality of layers of fiber embedded in a synthetic resin, said elongated tubular shaft having a butt section comprising a substantially cylindrical cross section of relatively larger cross section, which transitions without intervening discontinuities to a tapered intermediate section, said tapered intermediate section tapering without intervening discontinuities to a relatively smaller diameter tip section; said tip section including a portion having an outside diameter of between .330 and .400 inches;

said butt section having an outside diameter between .400 to .540 inches, said butt section diameter displacing a kick point above a center [pint] point of the composite golf club shaft.



RECEIVED
JUL 11 2003
TECHNOLOGY CENTER R3700